

Specification Amendments

Replace the paragraph between page 6, line 21 and page 8, line 4 with the following:

-- Figure 1 shows a schematic representation of the device according to the invention as an expansion vessel 1a. The expansion vessel 1a, arranged above a transformer (not represented), is connected via a connecting line (not represented) to an access opening 2. The expansion vessel 1a is also connected via an outlet opening 3 to a downstream expansion vessel 1b (not represented), it likewise being possible for the downstream liquid expansion vessel to be designed as an expansion vessel 1a with an outlet opening present in the upper covering (10a). The downstream expansion vessel 1b (not represented) thereby prevents an excessive rise in pressure within the expansion vessel 1a when it is completely filled with a liquid. Arranged within the expansion vessel 1a are two buoyant bodies 5, 6, the buoyant bodies 5, 6 being mounted rotatably in relation to the liquid surface of the liquid located in the expansion vessel 1a by means of spaced-apart connecting elements 4a, 4b. The upper buoyant body 5 is connected to a shaft 11 at a fixed vertical level 9 and rotatably mounted. The shaft 11 is advantageously fixed

at a fixed vertical level within the expansion vessel 1a on
the basis of a maximum gas volume to be detected in relation
to the inner side of the upper covering 10a of the expansion
vessel 1a and the shaft 11 is fixed at fixed vertical levels
by means of a fixing device 17. The lower buoyant body 6
serves for switching off the entire transformer unit if the
liquid level falls below a specific level, and consequently
threatens overheating of the transformer. The same applies to
the gate check 8, which in the case of a sudden rise in
pressure - such as for example in the case of an explosion
within the transformer - ensures immediate locking of the
expansion vessel 1a. The upper buoyant body 5 is arranged
within the expansion vessel 1a in such a way that, in the case
of gas formation in the expansion vessel 1a, permanent
detection of the gas volume is allowed. This is ensured by the
upper buoyant body 5 being arranged at a predetermined
distance from the inner side of the upper covering 10a of the
expansion vessel 1a and mounted rotatably with respect to the
relative level 9 that is fixed in this way. As a result, the
formation of a gas volume within the expansion vessel 1a can
be monitored permanently and continuously up until a maximum
predetermined gas volume is reached, and a warning message can
be issued by the system if the maximum predetermined gas
volume is exceeded. The buoyant body 5 advantageously
includes additional capacitive and/or inductive and/or optical

elements 18, a processing device 15 detecting the
electromagnetic and/or electrical and/or optical signals
generated by them. The density and size of the buoyant bodies
5, 6 and the length of the connecting elements 4a, 4b are
determined in dependence on the liquid used, and consequently
on the basis of the maximum possible torque caused by the
buoyancy of the floating body 5 in relation to the shaft 11.
The force transducer 7, connected to the upper buoyant body 5
or the upper connecting element 4a, permanently reproduces the
moment of force or torque generated by the buoyant body 5 and
is consequently a measure of the gas volume located in the
expansion vessel 1a, which as a result can be detected quickly
and reliably. A fixed-in-place angulometer or stationary
protractor 16 may be used to detect the angle between the
connection of the buoyant body 5 and a transverse axis of the
shaft for determining an angle to and thereby use the
knowledge of the size and shape of the expansion vessel 1a to
determine a gas volume located above the liquid.--